

The VacScene

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Abbreviations: Public Health - Seattle & King County (PHSKC), Centers for Disease Control and Prevention (CDC), Advisory Committee on Immunization Practices (ACIP), Food and Drug Administration (FDA)

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Public Health - Seattle & King County
Communicable Disease, Epidemiology and
Immunization Section

Jeffrey S. Duchin, M.D., Chief
David Bibus, Health Services Administrator
999 Third Avenue, Suite 500
Seattle, WA 98104

Phone: 206-296-4774 Fax: 206-296-4803
Email: Julie.Nugent-Carney@metrokc.gov
Website: www.metrokc.gov/health

The VacScene is a publication of Public Health – Seattle & King County written for health professionals. Content is consistent with current recommendations from the Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP).

Publication Staff

Editor: Julie Nugent-Carney
Contributors: Betsy Hubbard, Lauren Greenfield, Krista Rietberg, Darren Robertson



Flu Vaccine – What Happened?

Nationally, while some healthcare providers appear to have ample supplies of influenza vaccine, others (including Public Health) have received less than was ordered or none at all. Several manufacturers are planning to deliver over 70 million doses of two vaccine types: inactivated influenza vaccine (Sanofi Pasteur, Chiron and GlaxoSmithKline), and live attenuated vaccine (MedImmune). Chiron was not able to meet its earlier predictions of vaccine produced, and to date has not made known how much it is making this season. Each Chiron lot has been licensed at its release point rather than all lots at once, as happens with other manufacturers. Chiron will continue to ship in early December. CDC is purchasing some vaccine from Chiron and Sanofi Pasteur as a late season stockpile.

Public Health will assist with redistributing vaccine from those who are willing to sell it (at cost) to others who are in need; however, a recent survey revealed that very few providers have any surplus vaccine to share. To be part of this process, contact Public Health at: vaccineinfo@metrokc.gov or (206) 296-4775. **Please note that there is adequate supply of flu vaccine for high risk children.** Vaccines For Children (VFC) providers in King County who do not have enough pediatric flu vaccine should contact the PHSKC VFC Program at (206) 296-4782.

Changes in the Adult Immunization Schedule Now in Effect

The latest version of the Adult Immunization Schedule approved in June by ACIP is current from October 2005 through September 2006. The changes are briefly summarized here, and to access the full report, visit: www.cdc.gov/mmwr/preview/mmwrhtml/mm5440-Immunization1.htm. To download a camera-ready version of this schedule, visit: www.cdc.gov/nip/recs/adult-schedule.pdf. Here are the highlights:

♦ **Varicella** vaccine is recommended for all susceptible adults. Special consideration should be given to close contacts of persons at high risk for severe disease; or those at high risk for exposure or transmission (e.g., teachers of young children, child care employees, residents and staff members of institutional settings, including correctional institutions, college students, military personnel, adolescents and adults living in households with children, nonpregnant women of childbearing age, and international travelers). Evidence of immunity to varicella in adults includes any of the following:

- 1) documented age-appropriate varicella vaccination (i.e., receipt of one dose before age 13 years or receipt of two doses [administered at least four weeks apart] after age 13 years);
- 2) U.S.-born before 1966 or history of varicella disease before 1966 for non-U.S.-born persons;
- 3) history of varicella based on health-care provider diagnosis or parental or self-report of typical varicella disease for persons born during 1966-1997 (for a patient reporting a history of an atypical, mild case, health-care providers should seek either an epidemiologic link with a typical varicella case or evidence of laboratory confirmation, if it was performed at the time of acute disease);
- 4) history of herpes zoster based on health-care provider diagnosis; or
- 5) laboratory evidence of immunity.

♦ The footnote for **influenza** vaccination has been revised to include conditions that may compromise respiratory function (i.e., cognitive dysfunction, spinal cord injury, seizure disorder).

♦ A footnote has been added to **Haemophilus influenzae type b** vaccine because studies suggest good immunogenicity in adults with sickle cell anemia, leukemia, HIV infection or asplenia, and the vaccine is not contraindicated for these patients.

King County VFC News

-Vaccines For Children Program-

Step 1: Bag up all refrigerated vaccine and label "DO NOT USE"	Step 2: Move vaccine to a working refrigerator and/or correct the problem	Step 3: Call the VFC Program: (206) 296-4774 for directions on what to do next!
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Power Outages and Preserving Vaccines

On October 21, CDC published, "Impact of Power Outages on Vaccine Storage,"¹ in response to storage issues that arose after hurricane Katrina. Although it is unlikely a hurricane would strike the Northwest, power outages occur in many parts of King County during the fall and winter months. The CDC power outage guidelines are summarized here with additional recommendations from the VFC Program.

Power outages have significant implications for vaccine storage, and while outages may be brief, they can persist potentially for indefinite or extended periods of time. Vaccine can be damaged by temperatures that are too warm or too cold emphasizing the importance of having a storage plan for situations when the correct temperature range cannot be maintained (35-46° F in the refrigerator and ≤5° F in the freezer). The plan should be posted in a prominent place including a list of the names and phone numbers of who to contact during an outage. A sample storage plan (titled, "Responding to Vaccine Storage Incidents") is located in the "Storage and Handling" section of the VFC Provider Manual.

What To Do When the Refrigerator Fails

During an outage, vaccine should be transferred to another location that has a reliable power source (e.g., a hospital or grocery store with a generator). The temperature of the refrigerator and freezer should be recorded when the vaccines are removed. Vaccine should be transported following proper cold-chain procedures for storage and handling (if this isn't possible, the temperature should be monitored during transport). Keep ice bags and styrofoam coolers on hand for this purpose.

If there is no alternative, then it is advisable to keep the refrigerator and freezer doors closed until power is restored. This will help to conserve the cold mass of the vaccines. If the thermometer is located outside the unit, continue to monitor temperature (without opening the door).

When Power Is Restored

Record the temperature in the unit as soon as possible after the power has been restored. Continue monitoring until the correct temperature is achieved. Be sure to record the maximum temperature, and how long it was out of range. Do not administer the vaccine unless public health has been consulted, and keep it separated from any new product received. Please do not discard or otherwise make decisions about vaccine viability before contacting Public Health. Most refrigerated vaccines are relatively stable at room temperature for limited periods of time. Varicella and

measles/mumps/rubella (MMR) vaccines are the most susceptible to damage by improper storage conditions. MMR may retain potency at room temperature depending on the duration of exposure. With regard to varicella, CDC will be consulting with Merck Vaccines to determine the best course of action.

1. To view the complete document, visit: www.cdc.gov/nip/news/newsletters/imwrks/imwrks.htm Scroll down to the section titled "Special 2005 'read immediately' issues," and click on the link for the October 21 issue.

Can Your Refrigerator Handle Vaccine?

An unreliable refrigerator can compromise vaccine quality because inadequate refrigeration directly affects vaccine potency. Patients who receive incorrectly stored vaccine may not receive the maximum benefit. The VFC Program does not encourage the use of the so-called "dorm" refrigerator (i.e., a half-size, under-the-counter refrigerator). Problems with dorm-size refrigerators include:

1. Warm up quickly when the door is opened.
2. Too small for good air circulation, leading to crowding of vaccines.
3. It is often necessary to store vaccine directly underneath the freezer shelf. This freezer area is both too cold for refrigerated vaccines and not cold enough for frozen vaccines.

Dorm refrigerators are a gamble, plain and simple. Originally designed and intended for storing beverages and packaged snacks, they are just not serious enough for the important task of safeguarding vaccines. Lab refrigerators are ideal and even come in smaller sizes for space-challenged offices. However, they start at \$1,500 and can be too expensive for many practices. The standard, full-size refrigerator/freezer, designed for home use, is quite acceptable, and can cost as little as \$700 (less than the cost of two boxes of MMR vaccine). The VFC Program does not require particular refrigerators at this time, but repeated storage problems with older or smaller refrigerators can lead to financial consequences for providers. Practices wishing to upgrade to a full-size or lab refrigerator can request *Consumer Reports* ratings and other guidance from the VFC Program.

Short on Diluent?

When you receive a shipment of MMR or varicella vaccine, count the diluent and make sure there is enough to match the number of doses of vaccine. Merck no longer provides "extra" diluent. **If your shipment is short on diluent, it must be reported to the VFC Program the same day the shipment is received.**

Vaccine Information Statements:

Current List (as of 10/05)

DTaP/DT/DTP	7/30/01	PCV	9/30/02
Hepatitis A*	8/04/04	PPV	7/29/97
Hepatitis B	7/11/01	Polio	1/01/00
Hib	12/16/98	Rabies	11/04/03
Influenza (LAIV)*	7/18/05	Td	6/10/94
Influenza (TIV)*	7/18/05	Tdap*	9/22/05
Meningococcal*	10/07/05	Varicella	12/16/98
MMR	1/15/03		

*Recently updated.

Preview of Upcoming ACIP Recommendations

The following is a preliminary summary of the October 2005 ACIP recommendations which **are not official** until they are published in CDC's *Morbidity and Mortality Weekly Report*.

Discontinuation of VZIG

Varicella Zoster Immunoglobulin (VZIG) will no longer be manufactured due to decreased demand. The Blood Products Advisory Committee (BPAC) determined it was uncertain whether Immune Globulin Intravenous (IGIV) could substitute for VZIG, and there was insufficient data to support acyclovir as an effective substitute. However, the preliminary ACIP recommendations for post-exposure prophylaxis of varicella if VZIG is not available are to use IGIV, and practitioners may consider acyclovir. Limited amounts of already manufactured VZIG may be available from the distributor, FFF Enterprises at 1-800-843-7477.

Universal Recommendation for Hepatitis A Vaccine

ACIP unanimously passed an expanded recommendation for hepatitis A vaccination. Previously, it was advised the vaccine be limited to children living in specific communities with high rates of infection. (King County met this criteria; other counties in Washington did not.) Now it is proposed that all children routinely receive the two-dose series of hepatitis A vaccine as early as one year of age, and children who are not vaccinated at one to two years of age be caught up during the preschool years. This recommendation moves forward the CDC goal of eventually eliminating hepatitis A in the US.

Tdap Recommendations

The following recommendations apply to people who have not previously received tetanus, diphtheria and pertussis vaccine (Tdap):

- A one-time Tdap dose should be used instead of Td when adults (aged 19-64) are due for a booster. (Adults should receive decennial Td boosters, beginning 10 years after Tdap, until guidance on subsequent Tdap doses is available.)
- Intervals shorter than 10 years since the last Td may be used to protect against pertussis, particularly in settings with increased risk of maternal exposure, during outbreaks or in persons at high risk for pertussis complications. A minimum interval of two years between Td and Tdap is suggested to reduce the risk of local and systemic reactions after vaccination.
- Adults should receive a single dose of Tdap to protect against pertussis at least one month prior to having close contact with an infant (<12 mos). This includes women at preconception and post partum. A decision about whether Tdap should be used during pregnancy was deferred until ACIP reconvenes in February.
- Adults who require tetanus prophylaxis in wound management should receive Tdap.
- History of pertussis: Tdap as otherwise indicated.
- Adults with incomplete or unknown DTP/Tdap vaccination history should receive a three-dose primary series using Tdap to replace one Td dose, preferably for the first dose.

Measles, Mumps, Rubella and Varicella Vaccine

The preliminary recommendations for the combined measles, mumps, rubella, and varicella vaccine (MMRV) recently licensed as ProQuad® are as follows:

- MMRV vaccine is indicated for 12 months to 12 years of age.
- Combination vaccines are preferred over separate injection of the equivalent vaccine components.
- MMR-V should not be used as a dose of MMR unless a dose of varicella is also indicated or MMR vaccine is not available. It can only be used for the second dose of MMR if the person also needs varicella, such as in an outbreak setting or if he/she didn't get their first varicella dose.
- Can be used for 2 doses (when the 2nd dose of varicella vaccine is indicated).

ACIP approved MMRV for the national Vaccines For Children (VFC) Program; however, before Washington State and King County VFC Program can offer it, the State legislature needs to determine whether it can be funded. It is unlikely that any new vaccines will be added to Washington's VFC program before July 2006.

What? Polio in the U.S.?

Four children in Minnesota have been infected with vaccine-derived poliovirus (VDPV).¹ The index case was an immune compromised infant who was about to undergo bone marrow transplant. The original source of this virus likely was a person who received oral polio vaccine (OPV) in another country. Neither the child nor her family members had any history of international travel. All the infected children live in an Amish community that has low immunization rates.

Low Vaccination Coverage Leads to VDPV

VDPVs emerge from OPV as a result of continuous replication in immunodeficient persons or by circulation in populations with low vaccination coverage. VDPVs in highly immunized populations are rare. Widespread transmission among vaccinated health-care workers or in a community with high vaccination coverage is unlikely because fully vaccinated persons are not at risk for disease from this or other polioviruses, and seldom shed the virus for longer than a week if they are infected.

Persons in communities with low vaccination coverage should be warned of the potential risk for poliomyelitis. States with large communities with low vaccination coverage should identify these communities, assess their current vaccination status, and offer inactivated poliovirus vaccine (IPV).

The ACIP recommends that a full 3-dose IPV series be administered on an accelerated schedule if polio immunization status is unknown or not documented. A booster dose of IPV is recommended for adults in susceptible communities and health care workers at high risk for exposure who have completed a primary series but have not received an adult booster dose.

1. MMWR Dispatch, October 14, 2005 (www.cdc.gov/mmwr/preview/mmwrhtml/mm544a6.htm).

Return Services Requested

→ Coming Up February 9, 16, 23 & March 2, 2006: CDC Satellite Course
"Epidemiology & Prevention of Vaccine-Preventable Diseases"

Expect a registration form in the mail or call (206) 296-5252.

Highlights

Avian Influenza A Virus (a.k.a. "Bird Flu") Where to Get Answers

- To read the Outbreak Notice Update: Human Infection with Avian Influenza A (H5N1) Virus in Asia (current as of 11/14/2005) see: www.cdc.gov/travel/other/avian_influenza_se_asia_2005.htm
 - For international travel health recommendations, visit the CDC travel website: www.cdc.gov/travel
 - For more information about avian influenza from the CDC, visit: www.cdc.gov/flu/avian/index.htm
 - For current information about cases of avian influenza, visit the World Health Organization (WHO) website: www.who.int/csr/disease/avian_influenza/en/
 - For more information about influenza antiviral drugs, see: www.cdc.gov/flu/professionals/treatment/
 - To access the Federal website dedicated to providing information on pandemic influenza and avian influenza, go to: www.pandemicflu.gov/
 - To view the pandemic influenza plan for Public Health – Seattle & King County, visit: www.metrokc.gov/health/pandemicflu/plan
- To see the national pandemic influenza response plan, link to: www.dhhs.gov/pandemicflu/plan/
- For information about CDC recommendations for enhanced surveillance, diagnostic evaluation, and infection control precautions for H5N1, see: www.cdc.gov/flu/avian/professional/updates.htm

What You Should Know About GBS and Menactra

The CDC and FDA are investigating cases of Guillain-Barre syndrome (GBS) that developed in six adolescents within 14-31 days after vaccination with Menactra (meningococcal conjugate vaccine). The rate of GBS based on the number of cases reported within six weeks of Menactra administration is similar to the expected background rate. However, due to the temporal association, further information is being sought. No GBS cases were identified in the pre-licensure studies of approximately 7,000 recipients of Menactra. The epidemiology of these six cases closely reflects that of campylobacter – a known precipitating factor for GBS. In light of this information, the CDC has adapted its recommendations for Menactra as follows:

- ♦ Adolescents and caregivers should be informed of this ongoing investigation, and the **most current Meningococcal Vaccine Information Statement (dated 10/7/05)** should be used.
- ♦ It is unknown whether Menactra increases the risk for recurrence of GBS. Persons with a history of GBS who are not in a high risk group for invasive meningococcal disease **should not receive Menactra**.
- ♦ Providers with knowledge of possible **cases of GBS occurring after receipt of Menactra should report them to VAERS** (vaers.hhs.gov/ or 800-822-7967).

For more information from the CDC: www.cdc.gov/nip/vacsafe/concerns/gbs/gbs-menactra-facts.htm or www.cdc.gov/mmwr/preview/mmwrhtml/mm54d1006a1.htm.